

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 5 of 18

### **REMARKS**

Claims 1 – 45 are pending in the application. Claims 4 – 8 have been withdrawn from consideration. Claims 11 – 42 and 46 – 48 have been cancelled. Claims 1, and 9 have been amended. Claim 49 has been added.

Any cancellation of the claims should in no way be construed as acquiescence to any of the Examiner's rejections and was done solely to expedite the prosecution of the application. Applicant reserves the right to pursue the claims as originally filed in this or a separate application(s).

#### **35 U.S.C. §112, first paragraph)**

##### **Enablement**

Claims 1 – 3, 8 – 12 and 43 – 45 were rejected under 35 U.S.C. §112, first paragraph, for allegedly begin enabling “only for a targeted glycoconjugate comprising a specific bioactive agent and a specific targeting compound wherein the bioactive agent and the targeting compound are joined by a modified UDP-galactose-Acetyl group (UDP-GalNAc) having a ketone functional group appended at the C-2 position of the galactose ring using the mutant Y289L galactose transferase for detection assays, does not reasonably provide enablement for any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified saccharide compound for use in any medical therapy, any pharmaceutical composition comprising any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and then targeting compound are joined by any modified saccharide compound.” (Office Action, p.4). Applicants respectfully disagree.

The instant claims are directed to a targeted glycoconjugate comprising a bioactive agent and a targeting compound, wherein the bioactive agent and targeting compound are joined by a modified

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 6 of 18

saccharide compound, and wherein the modified saccharide compound comprises galactose and a reactive functional group attached to the C2 position of the galactose ring.

The Examiner argues that “(e)nableness is not commensurate in scope with how to make any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified saccharide compound for treating any diseases or diagnosis.” (Office Action, p.5). The Examiner points out that “the essential or critical features of the claimed limitation modified galactose residue having ketone group at C2 position of the galactose...are not recited in the claims.” (Office Action, p.5).

The Examiner argues further that “(e)nableness is not commensurate in scope with how to use any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified saccharide compound for treating any diseases or diagnosis.” (Office Action, p.5).

The Examiner argues that for these reasons it would require undue experimentation of one skilled in the art to practice the claimed invention. (Office Action, p.6). Applicants disagree.

The MPEP states that the determination that “undue experimentation” would have been needed to make and use the claimed invention is not a single, simple factual determination. Rather, it is a conclusion reached by weighing a combination of factual considerations: the breadth of the claims, the nature of the invention, the state of the prior art, the relative skill of those in the art, the predictability or unpredictability of the art, the amount of direction or guidance presented, the presence or absence of working examples, and the quantity of experimentation necessary. In re Wands, 858 F.2d at 737, 8 USPQ2d at 1404. The following factors may be considered.

According to the MPEP at 2164. 05(a), “whether the specification would have been enabling as of the filing date involves consideration of the nature of the invention, the state of the prior art, and the level of skill in the art. The initial inquiry is into the nature of the invention, i.e., the subject matter to which the claimed invention pertains. The nature of the invention becomes the backdrop to determine the state of the art and the level of skill possessed by one skilled in the art.”

As to the nature of the invention, the Examiner alleges only that “the claims encompass innumerable targeted glycoconjugate comprising any bioactive agent and any targeted compound

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 7 of 18

wherein the bioactive agent and the targeting compound are joined by any modified saccharide compound for use in any medical therapy." (Office Action, p.4)." Applicants argue that given the disclosure and examples, the nature of the invention is enabled as claimed.

First, Applicants point out that as amended the claims recite a reactive functional group **attached to the C2 position of galactose, wherein the reactive functional group is selected from an amino, hydroxy, carboxyl, thiol, phosphate, phosphinate, ketone, sulfate or sulfinic acid group.**

Accordingly, the claims recite that the particular saccharide is galactose. The claims recite that the reactive functional group is attached at the C2 positions. The claims recite that the reactive functional group is selected from an amino, hydroxy, carboxyl, thiol, phosphate, phosphinate, ketone, sulfate or sulfinic acid group. The specification fully enables the amended claims.

First, the claims have been amended to recite that the saccharide is galactose. The specification provides teaching, for example at page 9, directed to "Modified Saccharide Compounds." In particular, the specification teaches that "the glycoconjugates are constructed from their individual components, e.g., targeting compound (T), donor molecule including a saccharide residue (S), and bioactive agent (B)." (p.9) Galactose is a well known saccharide to any person skilled in the art.

Second, the claims have been amended to recite that the reactive functional group is attached to the saccharide, galactose, at the C2 position. The Specification teaches that the C2 position is favorable over other positions on the galactose ring because GalT has been shown to tolerate unnatural substrates containing minor substitutions at the C2 positions. For example, at page 48 of the specification, Applicants describe a strategy for the rapid and sensitive detection of O-GlcNAc glycosylated proteins, where experiments show that "the ketone functionality was appended at the C-2 position of the galactose ring because GalT has been shown to tolerate unnatural substrates containing minor substitutions at the C-2 positions, including 2-deoxy, 2-amino, and 2-N-acetyl substituents (Ian et al., 2001; Wong et al., 1995) (and)... 2-deoxy-Gal was transferred at rates comparable to Gal, whereas 3-, 4, and 6-deoxy-Gal were transferred at reduced rates." (page 48).

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 8 of 18

The claims recite that the reactive functional group is selected from an amino, hydroxy, carboxyl, thiol, phosphate, phosphinate, ketone, sulfate or sulfinate group.

The specification provides ample teaching of what a reactive functional group can be, for example at page 9 beginning at line 34, that teaches "(i)n one embodiment, the saccharide is modified so as to include a functional group, such as amino (-NH<sub>2</sub>), hydroxy (-OH), carboxyl (-COOH), thiol (-SH), phosphate, phosphinate, ketone, sulfate and sulfinate groups that aid in the attachment of the bioactive agent." Further, the specification teaches that the saccharide may be modified to include a functional group, to aid in the attachment of the bioactive agent, and provides examples, for example on page 10, where the specification teaches that "the modified saccharide (S) may include a ketone moiety which can be reacted with an amino group of a bioactive agent of interest so as to form a covalent bond between the two."

The specification provides ample guidance how to make the bioactive agent, for example how to join the bioactive agent to the modified saccharide. For example, the specification teaches at page 11 beginning at line 5, various methods that can be used to bind the bioactive agent to the modified saccharide:

The methods used to bind the bioactive agent (B) to the modified saccharide (S) depend on the structure of the bioactive agent. The bioactive compounds may preferably include a functional group which may be useful, for example, in forming covalent bonds with the saccharide residue, which are not generally critical for the activity of the bioactive agent. Examples of such functional groups include, for example, amino (-NH<sub>2</sub>), hydroxy (-OH), carboxyl (-COOH), thiol (-SH), phosphate, phosphinate, ketone group, sulfate and sulfinate groups. If the bioactive compounds do not contain a useful group, one can be added to the bioactive compound by, for example, chemical synthetic means. Where necessary and/or desired, certain moieties on the components may be protected using blocking groups, as is known in the art, see, e.g., Green & Wuts, Protective Groups in Organic Synthesis (John Wiley & Sons) (1991).

Exemplary covalent bonds by which the bioactive compounds may be associated with the saccharide residue (S) include, for example,

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 9 of 18

amide (--CONH--); thioamide (--CSNH--); ether (ROR', where R and R' may be the same or different and are other than hydrogen); ester (--COO--); thioester (--COS--); --O--; --S--; --S.sub.n--; where n is greater than 1, preferably about 2 to about 8; carbamates; --NH--; --NR--; where R is alkyl, for example, alkyl of from about 1 to about 4 carbons; urethane; and substituted imidate; and combinations of two or more of these.

Covalent bonds between a bioactive agent (B) and a modified saccharide residue (S) may be achieved through the use of molecules that may act, for example, as spacers to increase the conformational and topographical flexibility of the compound. Examples of such spacers include, for example, succinic acid, 1,6-hexanedioic acid, 1,8-octanedioic acid, and the like, as well as modified amino acids, such as, for example, 6-aminohexanoic acid, 4-aminobutanoic acid, and the like.

The Examiner alleges that "(t)he specification provided little or no guidance as to the binding specificity of the targeting compound beyond the mere mention of a laundry list of targeting molecules, bioactive agents joined by a list of modified saccharide compounds." (Office Action, p.5). The Examiner argues that "it is not clear that the skilled artisan could predict the efficacy of the conjugate exemplified in the specification or the breadth of glycoconjugate for treating any diseases, encompassed by the claims." (Office Action, p.6).

According to the MPEP at 2164.02, "compliance with the enablement requirement of 35 U.S.C. 112, first paragraph, does not turn on whether an example is disclosed." Moreover, "an applicant need not have actually reduced the invention to practice prior to filing. In *Gould v. Quigg*, 822 F.2d 1074, 1078, 3 USPQ 2d 1302, 1304 (Fed. Cir. 1987). The Court held that "the mere fact that something has not previously been done clearly is not, in itself, a sufficient basis for rejecting all applications purporting to disclose how to do it." 822 F.2d at 1078, 3 USPQ2d at 1304 (quoting *In re Chilowsky*, 229 F.2d 457, 461, 108 USPQ 321, 325 (CCPA 1956)). "The specification need not contain an example if the invention is otherwise disclosed in such manner that one skilled in the art will be able to practice it without an undue amount of experimentation. In *re Borkowski*, 422 F.2d 904, 908, 164 USPQ 642, 645 (CCPA 1970)."

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 10 of 18

As stated by the MPEP above, the specification does not need to contain an example if the invention is disclosed in such manner that one skilled in the art will be able to practice it without an undue amount of experimentation. Moreover, Applicant does not need to demonstrate therapeutic effects for particular diseases to enable the invention as claimed. The invention as claimed is a targeted glycoconjugate comprising a bioactive agent and a targeting compound, wherein the bioactive agent and targeting compound are joined by a modified saccharide compound, and wherein the modified saccharide compound comprises galactose and a reactive functional group attached to the C2 position of the galactose ring.

In certain embodiments, the glycoconjugate may be used in a therapeutic or diagnostic method or in medical therapy. The specification teaches a wide variety of bioactive agents that may be used, and that are known in the art as useful in therapeutic or diagnostic methods or in medical therapies. For example beginning at page 12, line 8, the specification teaches:

A wide variety of bioactive agents (B) may be included in the compounds of the present invention, such as any biologically active, therapeutic or diagnostic compound/composition. In general, the term bioactive agent includes, but is not limited to: polypeptides, including proteins and peptides (e.g., insulin); releasing factors and releasing factor inhibitors, including Luteinizing Hormone Releasing Hormone (LHRH) and gonadotropin releasing hormone (GnRH) inhibitors; carbohydrates (e.g., heparin); nucleic acids; vaccines; and pharmacologically active agents such as anti-infectives such as antibiotics and antiviral agents; anti-fungal agents; analgesics and analgesic combinations; anesthetics; anorexics; anti-helminthics; anti-arthritis agents; respiratory drugs, including anti-asthmatic agents and drugs for preventing reactive airway disease; anticonvulsants; antidepressants; anti-diabetic agents; anti-diarrheals; anticonvulsants; antihistamines; anti-inflammatory agents; toxins, anti-migraine preparations; anti-nauseants; anticancer agents, including anti-neoplastic drugs; anti-parkinsonism drugs; anti-pruritics; anti-psychotics; antipyretics; antispasmodics; anticholinergics; sympathomimetics; xanthine derivatives; cardiovascular preparations including potassium and calcium channel blockers, beta-blockers, alpha-blockers, cardioprotective agents; anti-arrhythmics; anti-hyperlipidemic agents; anti-

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 11 of 18

hypertensives; diuretics; anti-diuretics; receptor agonists, antagonists, and/or mixed function agonist/antagonists; vasodilators including general coronary, peripheral and cerebral; central nervous system stimulants; vasoconstrictors; cough and cold preparations, including decongestants; enzyme inhibitors; hormones such as estradiol, testosterone, progesterone and other steroids and derivatives and analogs, including corticosteroids; hypnotics; hormonolytics; immunosuppressive agents; muscle relaxants; parasympatholytics; central nervous system stimulants; diuretics; hypnotics; leukotriene inhibitors; mitotic inhibitors; muscle relaxants; genetic material, including nucleic acid, RNA, DNA, recombinant RNA, recombinant DNA, antisense RNA, antisense DNA, hammerhead RNA, a ribozyme, a hammerhead ribozyme, an antigenic nucleic acid, a ribo-oligonucleotide, a deoxyribonucleotide, an antisense ribo-oligonucleotide, and/or an antisense deoxyribo-oligonucleotide; psychostimulants; sedatives; anabolic agents; vitamins; herbal remedies; anti-metabolic agents; anxiolytics; attention deficit disorder (ADD) and attention deficit hyperactivity disorder (ADHD) drugs; neuroleptics; and tranquilizers.

Moreover, beginning at page 24, the specification discusses therapeutic uses. Accordingly, demonstration of specific therapeutic effects for particular diseases to enable the invention as claimed is not necessary.

Taken together, the teachings of the specification and knowledge of one of skill in the art enables one of skill in the art to practice the full scope of the claimed invention without having to resort to undue experimentation. Applicants accordingly request that the rejection be reconsidered and withdrawn.

#### **Written Description**

Claims 1 – 3, 8 – 12 and 43 – 45 were rejected under 35 U.S.C. §112, first paragraph, for allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. (Office Action, p.7). Applicants respectfully disagree.

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 12 of 18

The Examiner argues that "claims 1 and 45 are broadly drawn to any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified saccharide compound for use in any medical therapy." (Office Action, p.7). Applicants respectfully disagree.

The Examiner argues that "claim 2 is broadly drawn to any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified saccharide compound." (Office Action, p.7). Claim 2 depends from claim 1. Applicants respectfully disagree.

The Examiner argues that "claim 3 is broadly drawn to any targeted glycoconjugate comprising any bioactive agent and any targeting compound such as any glycoprotein wherein the bioactive agent and the targeting compound are joined by any modified saccharide compound." (Office Action, p.7). Claim 3 depends from claim 1. Applicants respectfully disagree.

The Examiner argues that "claim 8 is broadly drawn to any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified saccharide compound such as modified galactose." (Office Action, p.7). Applicants respectfully disagree. Claim 8 has been cancelled. Applicants respectfully request that this rejection be withdrawn.

The Examiner argues that "claim 9 is broadly drawn to any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified galactose further comprises any reactive functional group." (Office Action, p.7). Applicants respectfully disagree. Claim 9 has been cancelled. Applicants respectfully request that this rejection be withdrawn.

The Examiner argues that "claim 10 is broadly drawn to any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified galactose further comprises any reactive functional group such as ketone group." (Office Action, p.7). Applicants respectfully disagree. Claim 10 has been cancelled. Applicants respectfully request that this rejection be withdrawn.

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 13 of 18

The Examiner argues that "claim 11 is broadly drawn to any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified galactose further comprises any reactive functional group attached to the C2 position of the saccharide ring." (Office Action, p.7). Applicants respectfully disagree. Claim 11 has been cancelled. Applicants respectfully request that this rejection be withdrawn.

The Examiner argues that "claim 12 is broadly drawn to any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified galactose further comprises any reactive functional group attached to the C2 position of the galactose ring." (Office Action, p.7). Claim 12 depends from claim 1. Applicants respectfully disagree.

The Examiner argues that "claim 43 is broadly drawn to a pharmaceutical composition comprising any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified saccharide compound and a pharmaceutically acceptable carrier." (Office Action, p.8). Claim 43 depends from claim 1. Applicants respectfully disagree.

The Examiner argues that "claim 44 is broadly drawn to a kit comprising any targeted glycoconjugate comprising any bioactive agent and any targeting compound wherein the bioactive agent and the targeting compound are joined by any modified saccharide compound and a pharmaceutically acceptable carrier." (Office Action, p.8). Claim 44 depends from claim 1. Applicants respectfully disagree.

In the interest of compact prosecution, the above rejections will be addressed together. Claim 1 has been amended to recite a particular targeted glycoconjugate comprising a bioactive agent and a targeting compound, wherein the bioactive agent and targeting compound are joined by a modified saccharide compound that comprises galactose and a reactive functional group attached to the C2 position of the galactose ring.

As amended, the claims are sufficiently described in the specification.

Targeted glycoconjugate compounds are described at page 8.

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 14 of 18

Modified saccharide compounds are described at page 9.

Targeting compounds are described at page 10, page 18.

Bioactive agents are described beginning at page 10.

Applicants submit that the claims are sufficiently described in the specification to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Applicants respectfully request that the foregoing rejections be withdrawn.

**35 U.S.C. §102(b)**

Claims 1 – 3, 8 and 43 - 45 stand rejected under 35 U.S.C. §102(b) over US Patent No. 5, 608, 060 (The '060 reference herein). Applicants respectfully traverse the rejection.

To anticipate a claim, each and every element of the claim must be found in a single reference. This is discussed in the Manual of Patent Examining Procedure § 2131:

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaa Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the . . . claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required. In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

The '060 reference does not teach or suggest all the limitations of the instant claims. In particular, the '060 reference does not teach or suggest a targeted glycoconjugate comprising a bioactive agent and a targeting compound, wherein the bioactive agent and targeting compound are joined by a modified saccharide compound, and wherein the modified saccharide compound

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 15 of 18

**comprises galactose and a reactive functional group attached to the C2 position of the galactose ring.**

The '060 reference is directed to biotin compounds that can be used in diagnostic and therapeutic pre-targeting methods. The '060 reference also provides compounds comprising targeting moiety-ligand that are useful in diagnostic and therapeutic pre-targeting methods.

The '060 reference nowhere teaches a targeted glycoconjugate comprising a bioactive agent and a targeting compound, wherein the bioactive agent and targeting compound are joined by a **modified saccharide compound**.

Accordingly, the '060 reference does not teach or suggest all the limitations of the instant claims. Applicants respectfully request that the rejection be withdrawn.

### 35 U.S.C. §102(e)

Claims 1 – 3, 8 – 10 and 43 - 45 stand rejected under 35 U.S.C. §102(e) over US Patent No. 7, 625, 085 (the '085 reference herein). Applicants respectfully traverse the rejection.

The instant claims were set forth above.

The Examiner argues that “the '085 patent teaches various targeted glycoproteins such as transferring-SA linker-GDNF wherein the reference targeting compound such as transferring and bioactive agent such as GDNF are joined by a modified saccharide compound such as O-linked SA modified galactose using galatoseyl transferase.” (Office Action, p. 11 -12).

The '085 reference does not teach or suggest all the limitations of the instant claims. In particular, the '085 reference does not teach or suggest a targeted glycoconjugate comprising a bioactive agent and a targeting compound, wherein the bioactive agent and targeting compound are joined by a modified saccharide compound, and wherein the modified saccharide compound comprises galactose and a reactive functional group attached to the C2 position of the galactose ring.

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 16 of 18

The '085 reference does not teach modification at the C2 position. The present invention is based on the finding that appending the functional group to the C2 position provides an advantage over other positions (see, e.g. page 48, lines 27 – 28), where transfer at the 2 position is favorable to other positions, e.g. 3, 4 and 6. Nowhere does the '085 reference teach the C2 modification as presently claimed.

The '085 reference nowhere teaches a targeted glycoconjugate comprising a bioactive agent and a targeting compound, wherein the bioactive agent and targeting compound are joined by a modified saccharide compound, and wherein the modified saccharide compound comprises galactose and a reactive functional group attached to the C2 position of the galactose ring.

Accordingly, the '085 reference does not teach or suggest all the limitations of the instant claims. Applicants respectfully request that the rejection be withdrawn

**35 U.S.C. §103(a)**

Claims 1 and 8 - 12 stand rejected under 35 U.S.C. §103(a) over US Patent No. 7, 625, 085 (the '085 reference as above) and in view of Hang et al. (J Am Chem 123: 1242 – 1243, 2001) and Nauman et al. (Biochemica and Biophysica Acta 1568: 147 – 154, 2001). Applicants respectfully traverse the rejection.

The claims have been set forth above.

The Examiner argues that "(t)he invention in claim 11 differs from the teachings of the reference only in that the glycoconjugate wherein the reactive functional group is attached to the C2 position of the saccharide ring instead of any position in the saccharide ring." (Office Action, p.13). The Examiner argues that "(t)he invention in claim 12 differs from the teachings of the reference only in that the glycoconjugate wherein the reactive functional group is attached to the C2 position of the saccharide ring instead of any position in the saccharide ring." (Office Action, p.13). Applicants disagree.

As pointed out above, appending the functional group to the C2 position provides an advantage over other positions, where transfer at the 2 position is favorable to other positions, e.g. 3, 4- and 6-. The specification, at page 48, lines 27 – 28 teaches the advantage of substitution at the 2

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 17 of 18

position, where "2-deoxy-Gal was transferred at rates comparable to Gal, whereas 3-, 4- and 6-deoxy-Gal were transferred at reduced rates."

The Examiner argues that "Hang et al. teach the use of unnatural or modified monosaccharide such as 2-ketosugars or 2-keto isostere of GalNAc sugar or 2-acetaminodisugars as the substrate for GalNAc transferase for metabolic glycoprotein engineering in CHO cells. Hang et al. further teach the ketone reactive group produced by 2-ketosugars can be used as a molecular handle and more accessible for chemical reaction with biotin hydrazide." (Office Action, p.13). The Examiner argues that "Nauman et al. teach condensation of aldehydes or ketones with hydrazines or aminoxy compounds is an example of highly selective covalent reaction." (Office Action, p.13).

The Examiner argues that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the linker substrate of O-linked SA modified galactose of the '085 patent for the 2-ketosugars or 2-ketoisostere of GalNAc as taught by Hang et al for producing targeted glycoconjugate comprising bioactive agent GDNF and a targeting compound transferring joined by the modified 2-keto GalNAc at the C2 position of galactose as taught by the '085 patent and Hang." (Office Action, p.13 - 14). Applicants disagree.

As discussed above, the '085 reference provides no teaching or suggestion that a modification at the C2 position of the saccharide ring is preferable over any position in the saccharide ring. As taught in the present specification at page 48, GalT is able to tolerate unnatural substrates containing minor substitutions at the C-2 positions, including 2-deoxy, 2-amino, and 2-N-acetyl substituents. Moreover, the specification teaches at page 48 that analysis of the crystal structures of GalT complexed with UDP-GalNAc revealed that the C-2 N-acetyl moiety is accommodated in a shallow pocket within the active site. Accordingly, based on these findings, Applicants have specifically appended the ketone functionality at the C-2 position of the galactose ring as opposed to any other position, e.g. C-3, C-4, C-6. The '085 reference does not teach or suggest this specific modification.

The Hang and Nauman references do not make up for the defects of the '085 reference. The '085 reference provides no teaching or suggestion to modify any position of the saccharide ring

BOS2 718632.1

Application No. 10/580,108  
Response to Office Action of 11/12/2008  
Page 18 of 18

preferably over any other position, and it would not be obvious to one of ordinary skill in the art at the time the invention was made to substitute the linker substrate of O-linked SA modified galactose of the '085 patent for the 2-ketosugars or 2-ketoisostere of GalNAc as taught by Hang et al., where the ketone bearing sugar can react with a number of nucleophiles such as hydrazide or aminooxy compounds as taught by Nauman et al.

In view thereof, reconsideration and withdrawal of the rejection are requested.

### CONCLUSION

For the reasons provided, Applicant submits that all claims are allowable as written and respectfully requests early favorable action by the Examiner.

A one month extension of time is requested.

If the Examiner believes that a telephone conversation with Applicant's attorney/agent would expedite prosecution of this application, the Examiner is cordially invited to call the undersigned attorney of record.

Respectfully submitted,



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BOS2 718632.1